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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,806	10/12/2001	Shigetoshi Tomio	122.1052CIPC2	8860

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EXAMINER

DINH, DUC Q

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 06/15/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/974,806

Applicant(s)

TOMIO ET AL.

Examiner

DUC Q DINH

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13,15-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 is/are allowed.
- 6) ☒ Claim(s) 9-13;15-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13, 15-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 13, 15, 19 recited the limitation “the signal detection unit detecting display data form an external source.... an internal power supply unit ... in response to said detected display data (claim 13, 15, 19). Although the specification does mention “a signal DISPENA and signal DERS are internally detected (see [0051]; or the CPU 40 receives the signal (specific signal) DISPENA from the external source” [52]. The original disclosure, when filed, does not discloses the signal detection unit detecting display data form an external source.... an internal power supply unit ... in response to said detected display data”

The examiner examines the application based on the best understood of the claim language

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art, hereinafter AAPA (Fig. 1-4 and page 6, line 7-page 9, line 27) in view of Imamura (U. S. Patent No. 5,563,624) and further in view Yamakawa (U. S. Patent No. 4,848,876).

In reference to claims 9-10 and 22 the AAPA discloses in Fig. 1-4 a flat plasma panel using a high voltage source for supplying a sustain pulse. Imamura discloses in Fig. 1 flat panel display means having an internal power supply 28 for receiving high voltage from circuit 10, voltage detection unit 48 (col. 6, lines 11-34) and a drive control signal control means which response to the high voltage and is capable of stopping the drive control signals, signal DFF (col. 5, lines 41-60). Imamura does not teach internal power supply control means. Yamakawa discloses internal power control means by the DC-DC converter 120 and power control circuit 30. Imamura teaches controlling the power supply control signals (V1-V5) and Yamkawa teaches controlling the control signal based on a detected voltage level ( $V_{th}$ ) and provides both start operation and stop operation (col. 5, lines 27-59).

Art Unit: 2674

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide Imamura's voltage detection unit in the AAPA device for detecting the high voltage for and is capable of stopping the drive control signals, signal DFF (col. 5, lines 41-60) and it would have been also obvious for one of ordinary skill in the art at the time of the invention was made to provide the internal power control means of Yamakawa in the device of AAPA and Imamura to control the internal power supply to control the start operation and stop operation.

In reference to claims 11-12, see the above rejection. In addition, Imamura teaches detecting the power voltage levels and provides control of the display drive signals when the power supply voltage is rising and when it is falling (col. 9, lines 16-62). Even though Imamura only teaches comparing the values to a single voltage  $V_{th}$ , it would have been obvious to skill in the art to provide plural voltage detection levels given various conditions, for example when power is provided by an external socket or when power is supplied by a battery wherein various input voltage levels are different.

3. Claims 13 and 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the AAPA, Imamura, Yamakawa in view of Inoue (U. S. Patent No. 5,008,806).

In reference to claim 13 and 15, see the rejection as applied to claims 9-10. Inoue discloses a display 2 having a high voltage 17. Included is an external signal detection means, System RST and flip-flop 11, for detecting an external signal (Power On Reset). A drive control

Art Unit: 2674

signal control means 13 controls the signals to the flat panel display in response to the detected specific signal (Power On Signal), FLATISR.

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the external signal detection unit of Inoue in the device of AAPA, Imamura and Yamakawa for controlling the supply power and signals from a main system (col. 1, lines 50-53).

In reference to claims 16-17, Imamura teaches the power supply 28 receives an external detected signal RS wherein the signal changes a condition of the power supply circuit and the drive control circuit 47 also provides control of the display panel in respond to detected signals. In addition, Inoue provide changes to the power supply control signals FLATISR in response to the detected specific signal (power on reset) and, the system controls the operation of the display panel driving means in response to the detected specific signal, i.e., the specific signal, Power On Reset, is first detected which then produces signal FLATISR, which in turn controls the display panel driving signals 13. These would combine with Imamura to provide the proper display and power supply controls.

In reference to claim 18, Imamura provide the starting and stopping of the control signals bed on the signal levels,  $V_{th}$ , e.g., one level is above  $V_{th}$  and another is below  $V_{th}$ .

In reference to claim 19, refer to the rejection as applied to claims 15. In addition, the AAA discloses a three electrode surface discharged AC plasma display as claimed.

In reference to claim 20-21 the AAPA [0021] – [0026] describe the structure of an flat plasma as claimed.

***Response to Arguments***

4. Applicant's arguments filed on March 31, 2004, page 8-10 have been fully considered but they are not persuasive. With respect to the 103 rejection applied for claim 9-11: in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide Imamura's voltage detection unit in the AAPA device for detecting the high voltage for and is capable of stopping the drive control signals, signal DFF (col. 5, lines 41-60) and it would have been also obvious for one of ordinary skill in the art at the time of the invention was made to provide the internal power control means of Yamakawa in the device of AAPA and Imamura to control the internal power supply to control the start operation and stop operation. With respect to the rejection of claims 13 and 15-21, see the Art and the 112 Rejection First Paragraph as above.

The Rejection is maintained.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2674

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Allowable Subject Matter***

6. Claims 1-8 are allowed (as indicated in the previous Office Action).

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DUC Q DINH** whose telephone number is **(703) 306-5412**. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on **(703) 305-4709**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

**(703) 872-9306 (for Technology Center 2600 only)**



Art Unit: 2674

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive,  
Arlington, Va Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the Technology Center 2600 Customer Service Office whose telephone  
number is (703) 305-4700.

DUC Q DINH  
Examiner  
Art Unit 2674

DQD  
June 11, 2004

  
**REGINA LIANG**  
**PRIMARY EXAMINER**